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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,904	09/18/2003	Alex William Widiger	10541-1892	8519
48003	7590	03/11/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE/CHICAGO/COOK			NGUYEN, TUYEN T	
PO BOX 10395			ART UNIT	PAPER NUMBER
CHICAGO, IL 60610			2832	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,904

Applicant(s)

WIDIGER ET AL.

Examiner

TUYEN T. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 16, in lines 2-4, applicant claims “a stack of individual flat laminations arranged parallel to the centerline, *wherein two of the laminations bond the stack.*” Does this mean ferromagnetic core comprising one stack formed of two flat laminations? In lines 5-7, applicant claims “each lamination comprises opposite longitudinal edges that are non-parallel to the centerline to form *the core with a substantially frustoconical profile.*” Applicant should clarify the structure/arrangement of the ferromagnetic core having a stack formed of *two flat laminations* having opposite longitudinal edges non-parallel to the centerline forming a *substantially frustoconical profile*. The term “substantially” is a relative term. Applicant should clarify the structure/arrangement of the “opposite longitudinal edges that are *non-parallel to the centerline.*” There is no antecedent basis for “the zones.” Applicant should clarify what is intended by “the zones are separated by flat outer faces of the two laminations bounding the stack.” There is no antecedent basis for “the two laminations.”

Regarding claim 19, in lines 3-5, applicant claims “a stack of individual flat laminations arranged parallel to the centerline, *wherein two of the laminations bond the stack.*” Does this mean ferromagnetic core comprising one stack formed of two flat laminations? In lines 6-8,

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applicant claims “each lamination comprises opposite longitudinal edges that form the core with a *defined longitudinal profile and that are separated by flat outer faces of the two laminations bounding the stack.*” Applicant should clarify the structure/arrangement of the ferromagnetic core having a stack formed of *two flat laminations* having opposite longitudinal edges that form the core with a *defined longitudinal profile and that are separated by flat outer faces of the two laminations bounding the stack.* Applicant should clarify structure/arrangement of the “longitudinal profile.”

Regarding claim 21, applicant should clarify the structure/arrangement of the tab(s) structure of the “opposite longitudinal edges of the laminations” relative to the tab(s) of the “two laminations bounding the stack.” Are these laminations the same? Application should clarify.

Regarding claim 22, applicant should clarify the “imaginary frustum” structure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-22, *as best understood in view of the rejections under 35 U.S.C. 112 second paragraph*, are rejected under 35 U.S.C. 102(b) as being anticipated by Kikuta et al. [US 5,703,556].

Kikuta et al. discloses a core structure for an ignition coil [figures 3-6] comprising:

- a stack of individual flat laminations [figures 3-4] arranged parallel to a centerline, each lamination comprises opposite longitudinal edges [figure 6] that are non-parallel to the center line to form the core with a *substantially frustoconical profile/longitudinal profile*

- the zones are separated by flat outer faces [figure 3].

wherein some of the laminations comprising tabs [10a] projecting outward from their longitudinal edges beyond the frustoconical profile/longitudinal profile.

Response to Arguments

Applicant's arguments filed 12/22/2004 have been fully considered but they are not persuasive.

Applicant argues that:

[1] Kikuta does not disclose *zones at opposite sides of the core with substantially frustoconical profile*,

[2] Kikuta fails to disclose a core with a substantially frustoconical profile.

Examiner disagrees.

Regarding [1], applicant has not claimed, nor has examiner considered, the *zones at opposite sides of the core with substantially frustoconical profile*.

Regarding [2], Kikuta discloses a core with portion having a substantially frustoconical profile [figures 6, 10, 11].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN *TTN*

Trang T. Nguyen